

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a national stage application under 35 U.S.C. 371, of International Patent Application No. PCT/EP03/09394 with an international filing date of August 8, 2003, which claims priority to European Application No. EP 02 078 626.5, filed on September 4, 2002, and is hereby incorporated by reference.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH

[0002] Not Applicable.

BACKGROUND OF THE INVENTION

[0003] European Patent No. EP 0828 446 discloses a device for the presentation of bouquets, consisting of a collapsible support, several panels, a connection wrapped around the panels, a watertight sheet, a first fixation of the device, and a second fixation of the device consisting of a ribbon.

[0004] European Patent No. EP 0881 167 discloses a receptacle for bouquets of flowers, consisting of a circular base element, from which multiple elongated elements extend.

[0005] The purpose of the present invention is the quick presentation of a bouquet of flowers in a vertical position and the preservation of this bouquet by introducing water through an orifice located in the upper part of the device.

[0006] Another purpose of the invention is to create stability for all kinds of bouquets.

SUMMARY OF THE INVENTION

[0007] Briefly stated, the invention is a device for the presentation and preservation of bouquets of flowers, as well as a device for packaging and preserving bouquets of flowers.

[0008] The foregoing and other features, and advantages of the invention as well as embodiments thereof will become more apparent from the reading of the following description in connection with the accompanying drawings.

DESCRIPTION OF THE DRAWINGS

[0009] The present invention will be better understood when referring to the following figures:

[0010] Figure 1 shows a first embodiment of a device with three identical triangles, whose common side is the device's central vertical axis, corresponding to the right-angle side of the triangles.

[0011] Figure 2 shows the device of figure 1 with a V-shaped opening at a top of the device.

[0012] Figure 3 shows a base element of the first embodiment in figure 1.

[0013] Figure 4 shows the device in figure 1 with the base element affixed to a circular base.

[0014] Figure 5 shows a second embodiment of the present invention with two half-cones in an open position and connected by a hinge.

[0015] Figure 6 shows the second embodiment in figure 5 with the two half-cones in a semi-open position and connected by a hinge.

[0016] Figure 7 shows the second embodiment in figure 5 with the two half-cones in a closed position.

[0017] Figure 8 shows the second embodiment in figure 5 with the two half-cones in a closed position containing a bouquet, and wrapped with a watertight sheet.

- [0018] Figure 9 shows a geometrically conical device including, at its base, several elongated elements and an intermediate part having a collar and upper tabs.
- [0019] Figure 10 shows a geometrically conical device with a complete opening.
- [0020] Figure 11 shows a geometrically conical device with a partial opening.
- [0021] Figure 12 shows a device having a half-cone with a male means of closure.
- [0022] Figure 13 shows a device having a half-cone with a female means of closure.
- [0023] Figure 14 shows an unassembled outside support.
- [0024] Figure 15 shows an assembled outside support.
- [0025] Figure 16 shows a watertight pocket.
- [0026] Figure 17 shows the watertight pocket.
- [0027] Figure 18 shows the assembled device, with two tabs folded back.
- [0028] Figure 19 shows the assembled device with a single tab folded back.
- [0029] Corresponding reference numerals indicate corresponding parts throughout the several figures of the drawings.

DETAILED DESCRIPTION

- [0030] The following detailed description illustrates the invention by way of example and not by way of limitation. The description clearly enables one skilled in the art to make and use the invention, describes several embodiments, adaptations, variations, alternatives, and uses of the invention, including what is presently believed to be the best mode of carrying out the invention.

[0031] First Embodiment of the Present Invention

[0032] As shown in figures 1 to 4, the first embodiment of the present invention is a device for the presentation and preservation of individual bouquets of flowers, which allows the flower(s) to be held at the level of the device's central axis (11). The device includes three or more identical triangles (10), which have the central vertical axis (11) of the device as their common side, corresponding to the right angle side of the triangles, thus forming a geometrically pyramidal figure. A base element (13) corresponds to the pyramidal figure having three or more branches of identical length, which join at the central axis (11) of the device and form an identical angle between them where the flower stems, when tied up with a first connection, are speared onto the top (14) of the device. A watertight sheet can be placed under the base element (13). The watertight sheet converges towards the center top (14) of the device and is held by a second connection, such as a ribbon, to keep the watertight sheet around the bouquet. This arrangement allows the introduction of water through an orifice located in the upper part of the device. The top of the geometrically pyramidal figure can also include a V-shaped opening (15). The opening (15) allows the insertion of the first connection that holds the flower stems together. The device can also include a circular base (16), or one that is square, rectangular, triangular, polygonal, or trapezoidal attached to the base element (13).

[0033] Second Embodiment of the Present Invention

[0034] As shown in figures 5 to 8, the second embodiment of the present invention is a device that allows bouquets to be assembled by high-yield machines. This device is used for presentation and preservation of individual bouquets of flowers, allowing the flower(s) to be kept at the level of the device's central axis. In a closed position, the

device includes a flat circular base element, two half-cones (17) assembled with or without a hinge (18) or a fold, wherein the hinge (18) or fold represents the diameter of the base element. When the device is in the closed position, the device includes a conical body corresponding to the juxtaposition of two flat parts (19) of the two half-cones (17), a male (20) and female (21) means of closure, such as clips, on the two half-cones (17) in the central area of the cone, and upper tabs (22) at the top of the cone that adapt to the volume of the bouquet. A watertight sheet (23) is placed under the base element, which converges toward the central upper part of the device. The watertight sheet (23) is held in place by a connection, such as a ribbon, holding the watertight sheet (23) around the bouquet. This arrangement allows the introduction of water through an orifice (24) located in the upper part of the device. This device can be made of recyclable thermoformed or injected plastic material or of water-resistant cardboard or of any other material, and can have openings in the lower part of the cone.

[0035] Third Embodiment of the Present Invention

[0036] As shown in figure 9, a third embodiment of the present invention is again a device for the presentation and preservation of individual bouquets of flowers allowing the flower(s) to be held at the level of the device's central axis. The device is a geometrically conical figure having a base (25) with multiple lower elongated elements (26) that come together with the central vertical base axis. The device also includes an intermediate part having a solid conical body (28) that is slit over its width and a conical collar (29) that is slit over its width and integral with the body of the device, such that the two slits are stacked to allow better adaptation of the device to a large volume of

flowers. The device also includes an upper part having multiple elongated upper tabs (30) at the top of a cone that meet the central vertical axis of the device, where the upper tabs (30) can serve as holding teeth for an attachment.

[0037] Fourth Embodiment of the Present Invention

[0038] As shown in Figures 10 to 13, a fourth embodiment of the present invention is a device for the presentation and preservation of individual bouquets of flowers, allowing the flower(s) to be held at the level of the device's central axis. The device is a geometrically conical figure that may or may not include a base element (34) having a raised rim (35) relative to the perimeter. Multiple elongated elements (36) extend from the rim (35) and have a wide lower extremity (37) and a narrow upper extremity (38) more or less triangular in shape. The elongated elements (36) are integral with the rim (35) and rise in the direction of the central vertical axis of the base element (34). In the upper part of the device, two collars (39 and 40) are affixed on the elongated elements (36), wherein the upper collar (39) has a perimeter that is lower than the lower collar (40) to allow better stability of the device and vexation of enclosures, which may contain water. The device can be partially open if only the two collars (39 and 40) have an opening. The device can be completely open if, at the same time, the two collars (39 and 40) have an opening (62) and the raised rim (35) also has an opening (61). The device has a male connection (41) and a female connection (42). The device can include two half-cones, which can open or close in the upwards direction, and may or may not have a base element.

[0039] Fifth Embodiment of the Present Invention

[0040] As shown in Figures 14 to 19, a fifth embodiment of the present invention is a device for the presentation and preservation of individual bouquets of flowers that allows the flower(s) to be held at the level of the device's central axis. The device includes a juxtaposition of two supports: an outer support (54) and a watertight pocket (58). The outer support (54) is conical in shape and includes a base element, male (55) and female (56) connections on the cone's wall, and two tabs (57) in the upper part of the cone. The watertight pocket (58) also includes two tabs (59) with openings (60) in their upper part. The watertight pocket (58) slides into the inside of outer support (54) and attaches to the outer support (54) by penetrating the two tabs (57) of the outer support (54) into the two openings (60) of the watertight pocket (58). The tabs (57 and 59) can be folded back.

[0041] Most of the above embodiments can be surrounded with a watertight sheet placed under the base element that converges toward the central top of the device and is held by a second connection, such as a ribbon, in order to hold the watertight sheet around the bouquet. This arrangement allows introduction of water through an orifice located in the upper part of the device.

[0042] Changes can be made in the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.